

Abstract

5 An anti-friction bearing is provided which is low in vibration and
excellent in quietness. The anti-friction bearing has rolling elements
provided in inner and outer ring raceway grooves, which are made of
martensitic stainless steel composed of 0.60 to 0.75 percent of carbon by
weight, 10.5 to 13.5 percent of chromium by weight, 1.0 percent or less
of silicon by weight and 0.3 to 0.8 percent of manganese by weight, the
remainder of the composition being iron and inevitably introduced
impurities, having a hardness of HRC 58 or higher, containing eutectic
carbide particles of 10 microns or less in diameter, having oxygen and
titanium concentrations of 10 ppm or less respectively, and less than 10
percent by volume of retained austenite.